

Project Proposal

Proposal Title: Water Canyon Forage Enhancement Phase #1

Proposal Number: 1493

DWR Region: Southern Region

Lead Agency: USFS

County: Millard

Project Manager: Tyler Monroe

PM Phone: 4358656113

Regional Priority: Within Focus Area

Project Type: Terrestrial Habitat

Proposed Start Date: 8/15/2009

Project Location: The project area is located on the south end of the Pahvant Mountain range and is approximately two miles east of Cove Fort, Utah.

Project Description: Improve approximately 837 acres of big game winter range by mechanically treating (bullhog, lop & scatter, cut & pile) the chainings which occurred in the 1960's and 1970's.

Description of Problem/Need: As pinyon-juniper chainings reach approximately 25-30 years in age, young trees grow back at a density that understory production begins to fade. Cutting the young trees has proven to lengthen the value of the treatment for many more years by allowing the understory of shrub, grass, and forbs production to be available for wildlife and grazing.

As a result of pinyon/juniper encroachment, we have lost vast amounts of critical winter range areas, without the re-treatment of these older chainings; we can expect them to become less and less suitable habitat to the point of a monoculture pinyon/juniper stand.

Objectives: Goals:

1. Open up overstory
2. Enhance Big Game and small fauna winter range forage and habitat areas

Objectives:

1. Remove 100% of pinyon/juniper in old chaining areas.
2. Increase desirable and palatable forbs, shrubs, and grasses in the area by 25-30 %.

Relevance to Strategic Plans: This project is consistent with the Utah Comprehensive Wildlife Conservation Strategy in working to improve sagebrush-steppe and mountain brush habitats. Further, it is in line with the UDWR mule deer management plans to improve shrub-dominated winter range (UDWR Mule Deer Plan pg. 4 IIA. It will directly help achieve the habitat objective #2 of improving winter range quality on 200,000 acres.

This plan is consistent with the Fishlake National Forest Plan for wildlife habitat enhancement and fuels management. This project is part of a larger effort by the Forest to improve habitat, reduce fuel loading, and protect against catastrophic wildfire

Potential Risks: Disturbance may create niche for invasives - mitigated by washing equipment before entering project area.

Proposed Methods: Treatment will occur with the use of a track-type skid-steer loader (Bobcat) using a brushsaw, bullhog, chainsaw and grapple. These machines are equipped with a climate-controlled cab and have the potential to cut trees 12 months of the year. Costs associated with the Brush Saw are averaging \$45.00 to \$55.00 an acre and with the bullhog are averaging \$65.00 and \$75.00 an acre. The trees cut with the bullhog will mulch on-site and will enhance the grass, forbs, and shrub understory. The trees cut with the brushsaw or chain saw will both be piled and then burned to protect large pockets of bitterbrush or left scattered and then be broadcast burned. Subsequent to the prescribed fire, the burned areas will be seeded in order to prevent the encroachment of undesirable plant species in disturbed areas and interspaces. The main concern would be an invasion from cheat grass (*Bromus tectorum*). Seeding will be accomplished by utilizing an ATV mounted seeder or with a mountable Bobcat seeding attachment. Seeding of treated areas should occur just prior to the onset of winter to favor the highest germination rate possible. Suggested seed list is below.

Seed Source: UDWR/GBRC, Ephraim, UT

Seed Mix – Native and Introduced

Native or Introduced ☐ Common Name ☐ Scientific Name ☐ PLS LBS/ACRE

Native ☐ Bluebunch wheatgrass "Anatone" ☐ *Agropyron spicatum* ☐ 1

Native ☐ Indian ricegrass "Rimrock" ☐ *Oryzopsis hymenoides* ☐ 1

Native ☐ Sandberg bluegrass VNS ☐ *Poa sandbergii* ☐ 1

Native ☐ Slender wheatgrass "Pryor" ☐ *Elymus trachycaulus* ☐ 2

Native ☐ Thickspike wheatgrass "Bannock" ☐ *Elymus lanceolatus* ☐ 0.5

Native ☐ Western Yarrow 'SID Columbia' ☐ *Achillea millefolium* ☐ 0.1

Native ☐ Thickspike wheatgrass "Critana" ☐ *Elymus lanceolatus* ☐ 0.5

Introduced ☐ Crested wheatgrass "Hycrest" ☐ *Agropyron cristatum* ☐ 1

Introduced ☐ Orchardgrass 'Paiute' ☐ *Dactylis glomerata* ☐ 1

Introduced ☐ Alfalfa "Ladak" ☐ *Medicago sativa* ☐ 1

Introduced ☐ Small burnet ☐ *Sanguisorba minor* ☐ 1

Total Pounds per Acre ☐ 10.1

Estimated Seed Cost per Acre ☐ \$60.00

Estimated Cost of Seed Mix per Pound ☐ \$5.94

Project Proposal

Shapefile Name: S:/DWR/HPD-2010/GIS Shape Files/1493.shp

Seed Source:

UPCD Reg Team Coord Date:

Proposed
NEPA Action:

Proposed
Arch Action:

☒ Vegetation Monitoring ☐ Wildlife Monitoring

Monitoring Information: Monitoring work is already established and being evaluated. Photo points are in place and pre-treatment photos have been taken. Post-treatment photos will be taken and analyzed to determine if project objectives are met in 1, 3, 5, and 10 year photos.

Grazing
Management:

SPECIES BENEFITING

Mule Deer	Elk	Rio Grande Wild Turkey	Bobcat
Black-tailed Jackrabbit	Brewer's Sparrow	Small Mammals	Neotropical Birds

LAND OWNERSHIP

Owner	Acres
USFS	837
Total	837

PROPOSED FUNDING

Source	Amount Requested	Date Approved	Amount Approved
Unfunded Balance	\$27,000.00		\$0.00
USFS	\$95,500.00		\$95,500.00
Totals	\$122,500.00		\$95,500.00

PROPOSED BUDGET

Item	Description	DWR Account	Partner Contrib.
Seed (GBRC)	Seed for 450 acres @ \$60/ acre	\$27,000.00	\$0.00
Other	FS implementation of mechanical thinning and burn	\$0.00	\$95,500.00
	Totals	\$27,000.00	\$95,500.00

Project Map:

